Technics

Portable Digital Audio Tape Recorder

SV-260A

OPERATING INSTRUCTIONS

Notes:

- Specifications differ according to the area code.
- The "EB" area code, for example, indicates United Kingdom specifications.
- The "EB" indication is shown on the packing case.

Before operating this unit, please read these instructions completely.

ENGLISH

Dear Stereo Fan

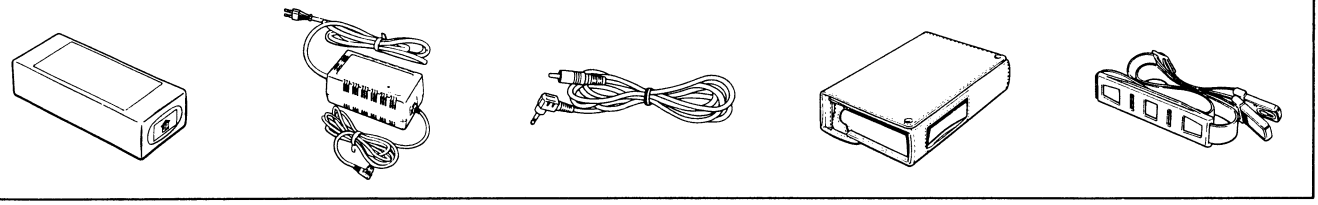
We want to thank you for selecting this product and to welcome you to the growing family of satisfied Technics product owners around the world.
We feel certain you will get maximum enjoyment from this new addition to your home.
Please read these operating instructions carefully, and be sure to keep them handy for convenient reference.

Contents

- **Accessories** 2
- **Suggestions for Safety** 3
- **Before Use** 3
- **Panel Controls and Functions** 4
- **Power Supply** 8
- **Basic Operations** 10
- **Playback** 12
- **Before Recording** 18
- **Recording** 20
- **About DAT Cassette Tape** 23
- **Operation Notes** 24
- **Maintenance** 25
- **Troubleshooting Guide** 26
- **How to Use the Carrying Case** 27
- **Specifications** 28

Accessories

- Rechargeable battery pack .. 1
- AC adaptor 1
- Coaxial cable .. 1
- Carrying case 1
- Carrying belt 1



Note: Configuration of AC adaptor and plug differs according to area.

FOR UNITED KINGDOM

("EB" area code model only)

The "EB" indication is shown on the packing case.

Important

THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE:	NEUTRAL
BROWN:	LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows.
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

ENGLISH

Marking sign is located on bottom of the unit.

SVENSKA

Märkskylten är placerad på apparatens undersida.

ENGLISH

AC cord replacement
Requires a special tool at a service station.

SVENSKA

Byte av nätsladd kräver ett specialverktyg
Sådant verktyg finns endast hos generalagenten.

ENGLISH

This apparatus was produced to BS 800: 1983.

FRANÇAIS

Cet appareil est conforme aux prescriptions de la Directive 76/889/C.E.E modifiée par la Directive 82/499/C.E.E.

ITALIANO

La Societá PANASONIC ITALIA S.p.A., importatrice di questo prodotto, dichiara che questo apparecchio è conforme alle disposizioni della direttiva C.E.E./82/499 (D.M. 10 aprile 1984).

NEDERLANDS

VOLDOET AAN EEG RICHTLIJN 82/499 E.E.G.

DANSK

DETTE APPARAT OVERHOLDER DE I EF-DIREKTIV Nr. 76/889 EEC AF 4. NOV. 1976, MED ÆNDRINGER IFLG. EF-DIREKTIV Nr. 82/499 EEC AF 7. JUN. 1982 GIVNE FORESKRIFTER MED HENSYN TIL RADIOSTØJ.

Suggestions for Safety

Before using this unit, be sure to read applicable items of the operating instructions and these safety suggestions carefully. Afterwards keep them handy for future reference. Take special care to follow the warnings indicated on the unit itself as well as in the operating instructions.

1. **Water and Moisture** -- Do not use the unit near any source of water or in excessively moist environments.
2. **Object and Liquid Entry** -- Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
3. **Heat** -- The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units that produce heat.
4. **Power Sources** -- The AC adaptor should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.
5. **Power Cord Protection** -- The AC adaptor cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit. Never take hold of the plug or cord if your hand is wet, and always grasp the plug body when connecting or disconnecting it.
6. **Cleaning** -- The unit should be cleaned only as recommended by the manufacturer.
7. **Nonuse Periods** -- The AC adaptor cord should be unplugged from the AC outlet when left unused for a long period of time.
8. **Damage Requiring Service** -- The unit should be serviced by qualified service personnel when:
   (a) The AC adaptor cord or the plug has been damaged; or
   (b) Objects have fallen or liquid has been spilled into the unit; or
   (c) The unit has been exposed to rain; or
   (d) The unit does not appear to operate normally or exhibits a marked change in performance; or
   (e) The unit has been dropped, or the enclosure damaged.
9. **Servicing** -- The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

1. THIS MANUAL CONTAINS IMPORTANT SAFETY AND OPERATING INSTRUCTIONS FOR AC ADAPTOR/ BATTERY CHARGER MODEL NO. SH-MA1.
2. BEFORE USING THE AC ADAPTOR/BATTERY CHARGER, READ ALL INSTRUCTIONS AND CAUTIONARY MARKINGS ON (1) AC ADAPTOR/BATTERY CHARGER, (2) BATTERY, AND (3) PRODUCT USING BATTERY.
3. CAUTION TO REDUCE RISK OF INJURY, CHARGE ONLY RECHARGEABLE BATTERY PACK TYPE SH-MB1. OTHER TYPES OF BATTERIES MAY BURST CAUSING PERSONAL INJURY OR DAMAGE.
4. DO NOT EXPOSE THE AC ADAPTOR/BATTERY CHARGER TO RAIN OR SNOW.
5. USE OF AN ATTACHMENT NOT RECOMMENDED OR SOLD BY THE AC ADAPTOR/BATTERY CHARGER MANUFACTURER MAY RESULT IN A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.
6. TO REDUCE THE RISK OF DAMAGE TO ELECTRIC PLUG AND CORD, PULL BY THE PLUG RATHER THAN THE CORD WHEN DISCONNECTING THE AC ADAPTOR/ BATTERY CHARGER SH-MA1.
7. MAKE SURE THE CORD IS LOCATED SO THAT IT WILL NOT BE STEPPED ON, TRIPPED OVER, OR OTHERWISE SUBJECTED TO DAMAGE OR STRESS.
8. AN EXTENSION CORD SHOULD NOT BE USED UNLESS ABSOLUTELY NECESSARY. USE OF IMPROPER EXTENSION CORD COULD RESULT IN A RISK OF FIRE AND ELECTRIC SHOCK. IF EXTENSION CORD MUST BE USED, MAKE SURE:
   A. THAT THE PINS ON THE EXTENSION CORD ARE THE SAME IN NUMBER SIZE, AND SHAPE AS THOSE ON THE AC ADAPTOR/BATTERY CHARGER SH-MA1.
   B. THAT EXTENSION CORD IS PROPERLY WIRED AND IN GOOD ELECTRICAL CONDITION.
9. DO NOT OPERATE THE AC ADAPTOR/BATTERY CHARGER WITH DAMAGED CORD OR PLUG. REPLACE THEM IMMEDIATELY.
10. DO NOT OPERATE THE AC ADAPTOR/BATTERY CHARGER IF IT HAS RECEIVED A SHARP BLOW, BEEN DROPPED, OR OTHERWISE DAMAGED IN ANY WAY; TAKE IT TO AN AUTHORIZED SERVICENTER.
11. DO NOT DISASSEMBLE THE AC ADAPTOR/BATTERY CHARGER; TAKE IT TO AN AUTHORIZED SERVICENTER WHEN SERVICE OR REPAIR IS REQUIRED. INCORRECT REASSEMBLY MAY RESULT IN A RISK OF ELECTRIC SHOCK OR FIRE.
12. TO REDUCE THE RISK OF ELECTRIC SHOCK, UNPLUG THE AC ADAPTOR/BATTERY CHARGER FROM OUTLET BEFORE ATTEMPTING ANY MAINTENANCE OR CLEANING. TURNING OFF CONTROLS WILL NOT REDUCE THIS RISK.

Before Use

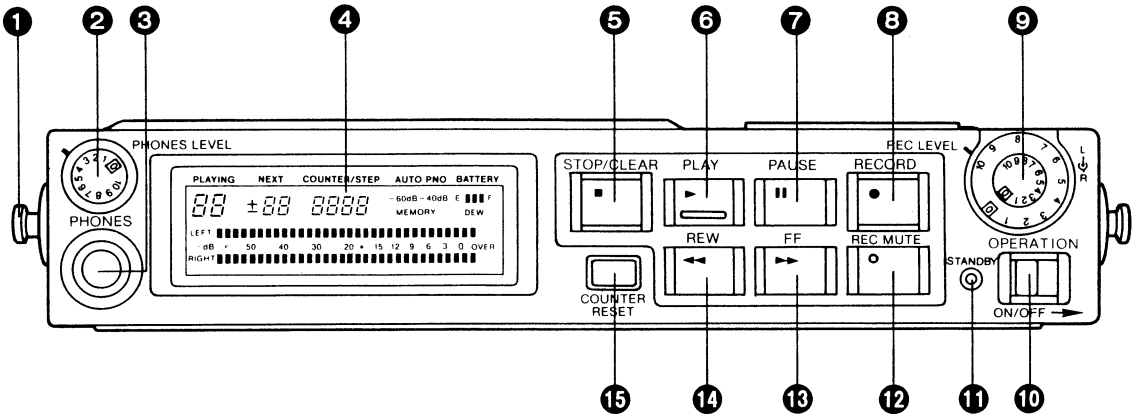
The AC adaptor has been pre-set for operation on 220–240 V. Make sure the voltage adjustor of your AC adaptor is matched to your local voltage before plugging it into the AC outlet.

If the pre-set voltage is different from your local voltage, turn the voltage adjustor with a minus (−) screwdriver so that it corresponds to your local voltage.
Note that this unit will be seriously damaged if this setting is not made correctly.

ENGLISH

Panel Controls and Functions

Front panel



❶ Carrying belt anchor (on both sides)

(See page 27.)

❷ PHONES LEVEL control

Use this control to adjust the output level to the headphones.

> When listening to music with stereo headphones, avoid listening for prolonged periods of time. Hearing experts advise against continuous extended play.

❸ PHONES jack

❹ Display panel

❺ STOP/CLEAR button and indicator (■)

Press to stop tape running. This button also clears the program memory. (Indicator illuminates when in STOP mode. During end search operation or tape loading/unloading, the indicator flashes on and off.)

❻ PLAY button and indicator (▶)

Press to initiate recording or playback. This button is also used to record track numbers manually. (Indicator illuminates during playback and recording.)

❼ PAUSE button and indicator (❚❚)

Press to temporarily interrupt playback or recording. (Indicator illuminates while in PAUSE or recording standby mode.)

❽ RECORD button and indicator (●)

Press to put the unit in the record standby mode. When ready to begin recording, press the PLAY button after the RECORD button. (Indicator illuminates during recording and when in recording standby mode.)

❾ REC (record) LEVEL controls

Use these controls to adjust the recording level.
The outer control adjusts the right channel level and the inner control the left channel level.

❿ OPERATION switch

Push to the right to turn the unit on and off.

⓫ STANDBY indicator

- When the unit is left in the STOP or PAUSE mode for approximately 10 minutes, the STANDBY indicator will light up and the unit will automatically go into an energy saving STANDBY mode.
- If the unit is left in the STANDBY mode for approximately 30 minutes more, it will automatically turn itself OFF.

⓬ REC (record) MUTE button (○)

Press to insert a silent section of approximately four seconds.
Press the PLAY button to resume recording.

⓭ FF (fast-forward) button and indicator (▶▶)

Press to wind the tape rapidly forward. (Indicator illuminates while tape is advancing.)

- If this button is pressed when the unit is in the STOP or PAUSE mode, the tape will move at 60 times its normal speed.
- When this button is held down during playback, the tape will move at 11 times its normal speed.

⓮ REW (rewind) button and indicator (◀◀)

Press to wind the tape rapidly backwards. (Indicator illuminates while tape is rewinding.)

- If this button is pressed when the unit is in the STOP or PAUSE mode, the tape will rewind at 60 times normal speed.
- When this button is held down during playback the tape will rewind at 15 times normal speed.

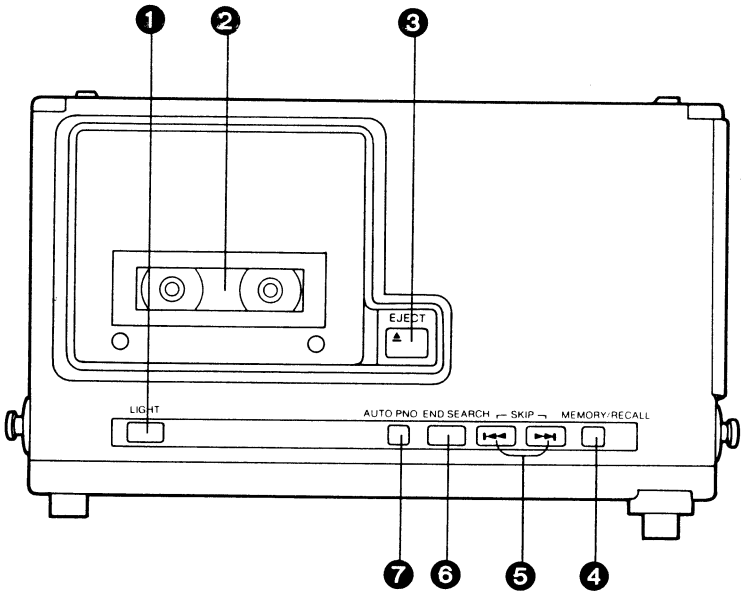
Fast Rewind

If the REW button is pressed while the tape is rewound, you will shift into an even faster rewind mode.
[The rewind indicator (◀◀) flashes on and off during fast rewind operation.]

⓯ COUNTER RESET button

Press to reset the tape counter to "0000".

Top panel



1 LIGHT switch

- Press this switch to light up the display. When using the AC adaptor to power of the unit the display will stay lit.
- Under battery power, however, the display will stay lit for about 20 seconds, when this switch is pressed and then goes out as an energy saving measure.

2 Cassette holder

3 EJECT button (▲)

Press this button to open the cassette holder.

4 MEMORY/RECALL button

Used to enter steps in random access programming. When this button is pressed during program play (recall mode), the display will indicate each program step as they were entered.

5 Forward and backward SKIP buttons (|◀◀ • ▶▶|)

These buttons are used to specify the desired program number for the following three operations:

1. **Program playback**
2. **Access playback**
3. **Skip playback**

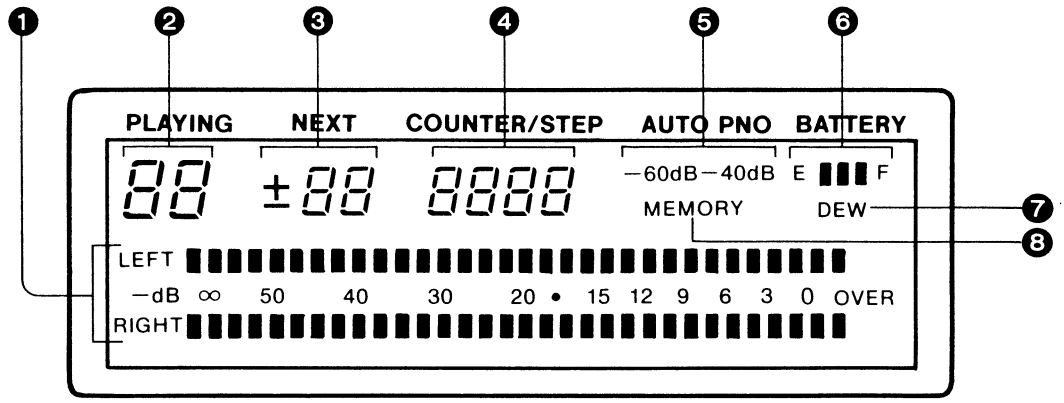
6 END SEARCH button

When this button is pressed, the tape advances rapidly to the last recorded position on the tape and then stops. This is useful when it is desired to continue recording from the last recorded position.

7 AUTO PNO (program number) button

Press this button to have program numbers recorded on the tape automatically during recording, and to set the sensitivity level for trigger a program number increment in auto mode.

Display panel



❶ Recording/playback level meters (peak level)

- During recording, shows the recording level.
- During playback, shows the playback level.
- The upper meter shows the level of the left channel signal and the lower meter shows the level of the right channel signal.

❷ PLAYING display

Shows the program number being played.

❸ NEXT display

- During program playback, shows which program number is coming up next.
- When programming, shows the program number.
- During skip play, shows the number of tunes which is being skipped over.

❹ COUNTER/STEP display

- The 4-digit tape counter shows the position on the tape. While programming a sequence of tunes, the counter shows the step number of the programmed sequence. (P-01, P-02...P-03).

❺ AUTO PNO (program numbering) display

Shows the automatic inter-track gap detection level. For auto program number recording, press the AUTO PNO button to toggle between the −40 dB and −60 dB settings.

❻ BATTERY indicator

This indicator gives an approximate indication of the charge level remaining in the batteries.

E■■■F ... Batteries are fully charged.

E■ F ... Batteries are almost completely discharged. (When the last segment of the battery indicator flashes on and off during recording or playback, the unit will automatically shut itself OFF in approximately three minutes.)

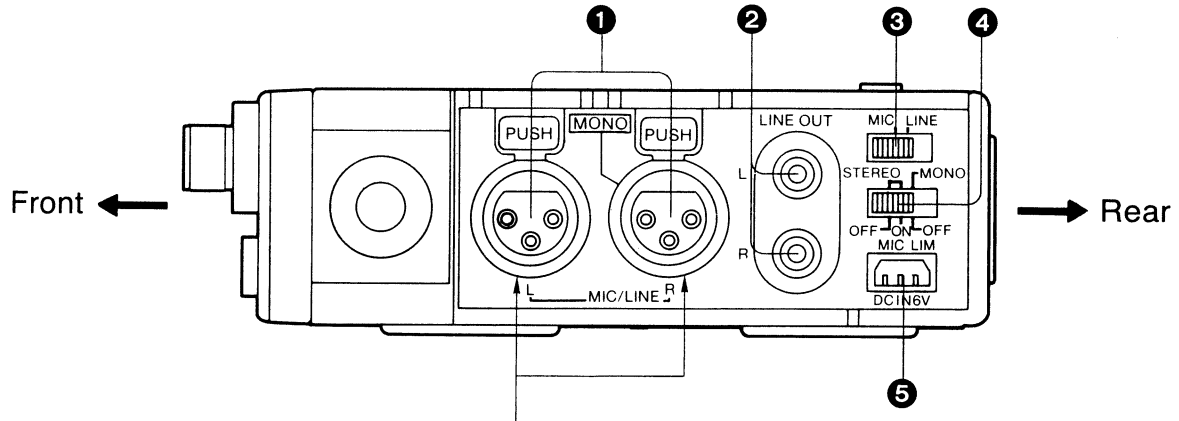
❼ DEW indicator

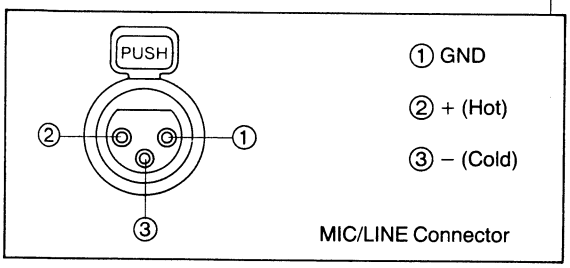
Shows that moisture has condensed inside the unit.

❽ MEMORY indicator

Shows that program numbers have been entered in the memory when the MEMORY/RECALL button is pressed for programming.

Right side panel





❶ MIC/LINE input terminals (L/R)

- These are balanced XLR analog audio input connectors.
- Connect the microphones or line • level sources for recording.
- Select the input sensitivity by the Input select switch.

❷ LINE OUT jacks (L/R)

- These are the audio output terminals for playback.
- Connect to the input terminals of an amplifier.

❸ Input select switch (MIC/LINE)

This switch selects input sensitivity of the input preamp circuit.

MIC ..... Use this setting to record with microphones.
LINE .... Use this setting to record from line level sources or to record with high output microphones.

❹ STEREO/MONO (monaural)/MIC LIM (limiter) switch

This switch selects stereo recording without limiter, stereo recording with limiter and monaural recording without limiter from right channel input. If this switch is set to the MIC LIM "ON" position for microphone recording, the limiter suppresses distortion caused by high volume sound bursts. The limiter circuit is activated only when there are sudden high level sounds and helps prevent distortion in the recording. For monaural recording with microphone, set this switch to the MONO position.

Be sure to connect a microphone to the RIGHT channel of MIC/LINE input terminals for this recording.

The left channel is also recorded simultaneously with the recording level of approx. 15 dB lower than the right channel. This is used for back-up recording when there are sudden high power bursts.

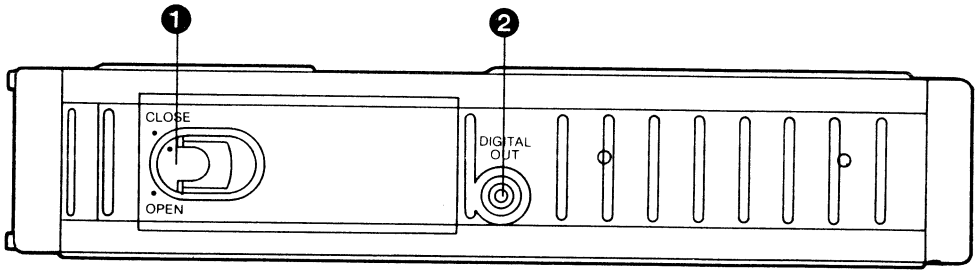
Notes:

- Do not connect a microphone to the left channel, when this switch is set to the MONO position, in order to avoid receiving no input from the microphone.
- When the input select switch is set to the LINE position, the limiter does not function.

❺ DC IN jack (DC IN 6V)

Connect the AC adaptor (included) to this jack for AC outlet use or to recharge the battery pack.

Rear panel



❶ Rechargeable battery OPEN/CLOSE knob

This knob turns the latch for opening and closing the battery compartment door.

❷ DIGITAL OUT terminal (DIGITAL OUT)

Terminal for digital output

Digital data output from the unit can be input into another device with the appropriate digital input terminals by means of the coaxial cable (included).

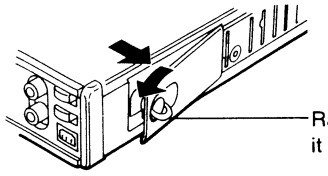
ENGLISH

Power Supply

1. Using the rechargeable battery pack

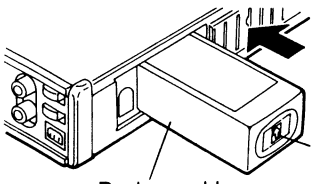
Note:
The rechargeable battery pack of this unit was charged by the manufacturer before shipping. However, during transport and storage it may have discharged.
Be sure to recharge the battery pack before using it for the first time.

1 Open the cover on the rear panel of this unit.



Raise the recessed ring and turn it in the direction marked OPEN.

2 Insert the rechargeable battery pack into the battery compartment.



Rechargeable Battery Pack (included)

- The rechargeable battery pack is marked with arrows indicating the correct direction in which to insert it into the recorder.

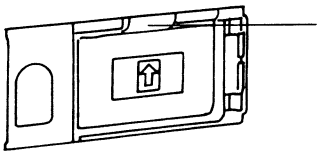
Check the arrows as indicated in the diagram to make sure the rechargeable battery pack is inserted right side up.

3 Close the cover.

Turn the ring in the direction marked CLOSE and return it to its recessed position.

Removing the rechargeable battery pack

Open the cover, press and lift the locking latch, and gently remove the rechargeable battery pack by hand. Tilt the unit slightly to get the rechargeable battery pack out.



Locking latch

Checking the battery capacity

The strength of the charge remaining in the battery is shown on the BATTERY indicator on the right side of the display.

BATTERY

E ■■■ F ---- Battery is fully charged.

■■□ ---- Sufficient power to run the unit but charge is low.

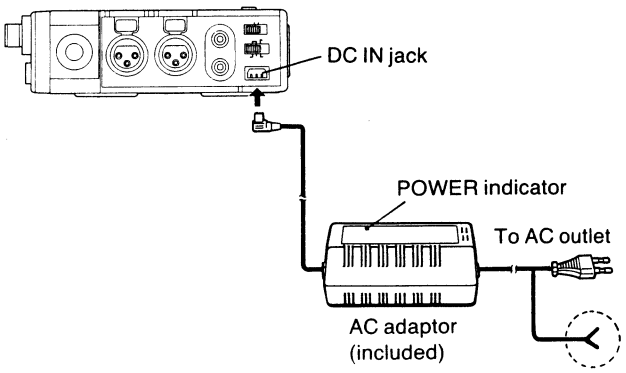
■□□ ----

-■□□ ---- When the battery charge indicator begins to flash on and off, the unit will automatically shut itself off after approximately three minutes.

Flash on and off

Recharging the battery pack

Connect the AC adaptor to the unit with the battery pack loaded normally. The POWER indicator light on the AC adaptor will go on and recharging will commence.



For UK

Fit a suitable plug to the AC power supply cord.

Recharge battery pack with the power OFF.

Charging time	Operation time
About 4 hours	About 2.0 hours
About 8 hours	About 2.2 hours

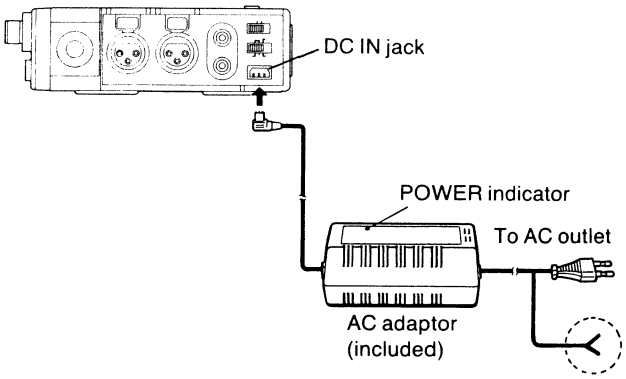
- The unit can be powered with the AC adaptor while the battery pack is being recharged.
- The POWER indicator light goes off as recharging nears completion; however, leave the unit connected to the AC adaptor for the full time period as given above.

Precautions for rechargeable battery pack and charging

- When recharging use ONLY the AC adaptor supplied.
- During recharging, heat is generated in the AC adaptor as well as in the rechargeable battery pack. This is completely normal and is no cause for alarm.
- After recharging for the first time or after not using the unit for a long time, battery powered operating time, even after eight hours of recharging, will be somewhat shorter than normal. The effectiveness of recharging, however, will return to normal after a few recharging cycles.
- Do not position the unit or recharge it near heaters, in direct sunlight or where it will be exposed to excessive humidity or moisture.
- Do not block any of the ventilation openings on the AC adaptor.
- If the rechargeable battery pack gets damaged or misshapen for any reason (for instance, after dropping it), do not insert it into the unit. Doing so may damage the unit or cause the rechargeable battery pack to get stuck inside.
- The rechargeable battery pack can be recharged about 300 times. (Battery powered operating time at normal temperatures will gradually drop as the rechargeable battery pack wears out to about half of the capacity of a new rechargeable battery pack.)
- The rechargeable battery pack tends to lose its charge even if you do not use the unit. The rechargeable battery pack should be kept charged even if you do not plan to use the unit for a long time. To maintain the recharging capacity of the rechargeable battery pack it should be recharged at least once every six months.
- When the rechargeable battery pack begins to run down very quickly after recharging, it needs to be replaced.

2. Using a household AC outlet

Note:
The rechargeable battery pack must be left loaded normally in the unit.



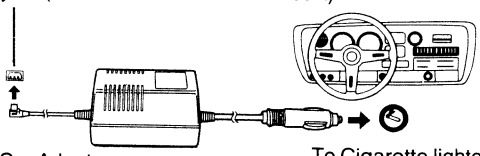
Fit a suitable plug to the AC power supply cord.

3. Using the car adaptor

When using the SV-260A with the Technics car adaptor (not included), model SH-MC1, make connections as shown below.

Note:
The rechargeable battery pack must be left loaded normally in the unit.
(For detailed information, refer to the operating instructions of the Technics car adaptor.)

DC IN jack (on the left side of the SV-260A)



Car Adaptor
(SH-MC1, not included)

To Cigarette lighter socket
(DC 12 V)

Notes:
- The car adaptor can be only used with cars having a 12-volt battery. Therefore, do not use it in other automobiles such as trucks, buses, etc. that have 24-volt batteries.
- Do not use the car adaptor with cars that have a positive ground system.
- The car adaptor cannot be used to recharge the rechargeable battery pack.

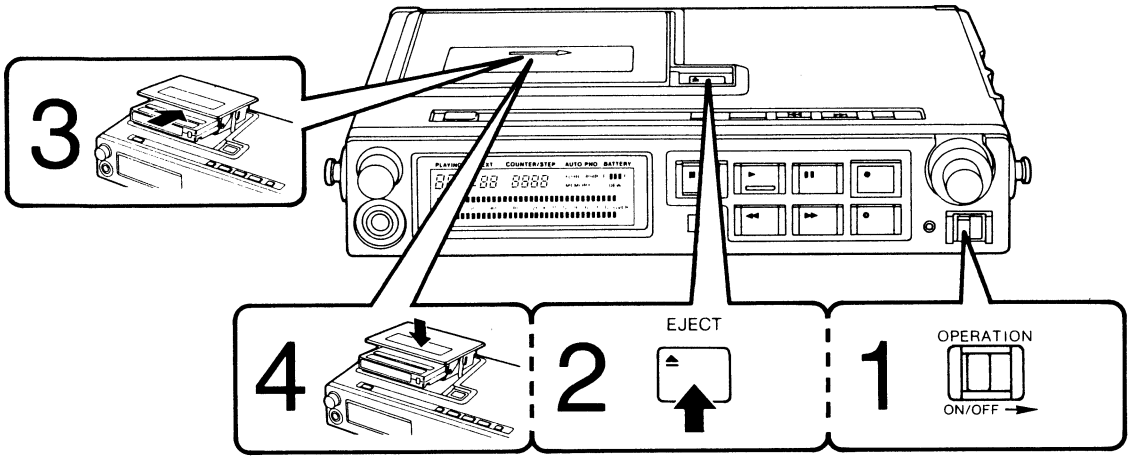
CAUTION:
- Use only Technics AC adaptor (SH-MA1) and rechargeable battery pack (SH-MB1), which are both included with the unit.
- For car use, use only the Technics car adaptor (not included), model SH-MC1.
- If you use adaptors other than the SH-MA1 and SH-MC1, the SV-260A may be damaged.

ENGLISH

Basic Operations

The following operations must be performed before beginning playback or recording.

Operation Procedures



1 Turn the OPERATION switch ON.

Moving the OPERATION switch to the right will turn the unit ON. (When the switch is released, it will return to its original position.) The display panel and STOP/CLEAR indicator will illuminate.
Repeating the same action—moving the OPERATION switch to the right—will turn the unit OFF.

2 Press the EJECT button to open the cassette holder.

The cassette holder will rise up after a few seconds during which time STOP/CLEAR indicator flashes on and off.

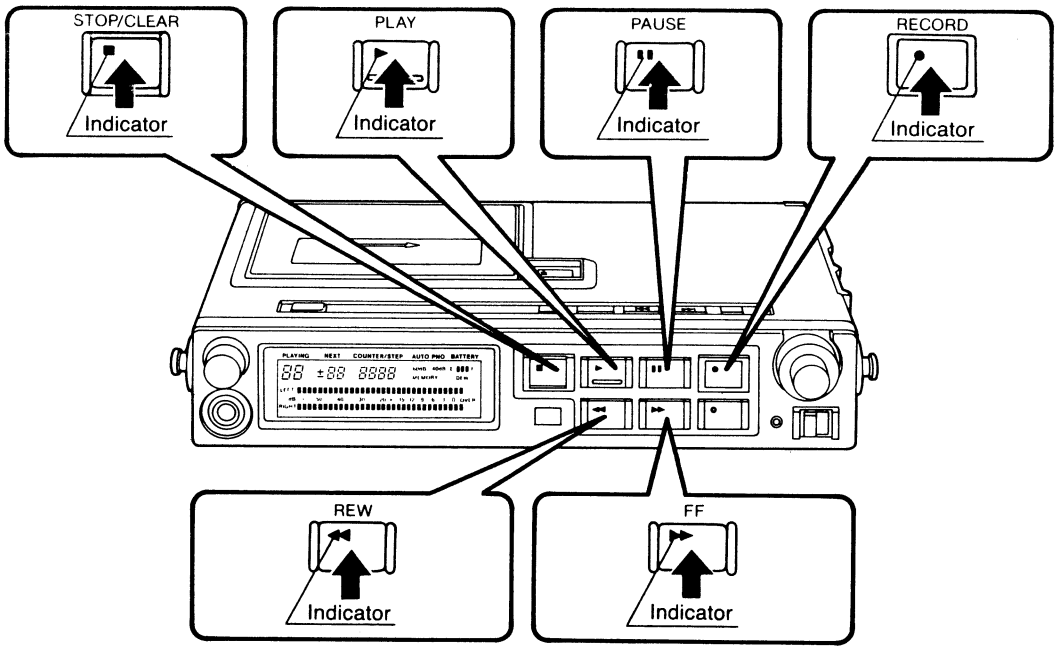
Note:
The EJECT button will function even when the unit is turned off, provided that a charged battery pack or the AC adaptor (with a battery pack) is connected to the unit.

3 Insert a cassette tape.

- Make sure that the side of the cassette tape with the tape window (where the tape itself is visible) is face up.
- Insert the cassette tape with the label end in front as far as it will go into the holder.

4 Close the cassette holder.

After checking that the cassette tape is properly loaded, press the top of the cassette holder down until it locks in place. The STOP/CLEAR indicator flashes on and off during tape loading and unloading.
(The unit is in the STOP Mode when a cassette tape is being loaded.)



To initiate playback or recording

Press the PLAY button.

The PLAY indicator illuminates and playback commences.

Press the RECORD button and then press the PLAY button.

The RECORD and PLAY indicators illuminate and recording commences.

To temporarily interrupt playback or recording

Press the PAUSE button.

The PAUSE indicator illuminates.

To continue playback or recording, press the PLAY button.

To terminate playback or recording

Press the STOP button.

Playback or recording stops. During program play, all track numbers in memory will also be cancelled.

To wind the tape rapidly forward

(Does not operate during recording)

Press the FF button when the unit is in the STOP or PAUSE mode. The tape is wound forward rapidly.

- If the FF (fast forward) button is held down during playback, FF will advance the tape at 11 times normal speed.

To wind the tape rapidly backwards

(Does not operate during recording)

Press the REW button when the unit is in the STOP or PAUSE mode. The tape is rapidly rewound.

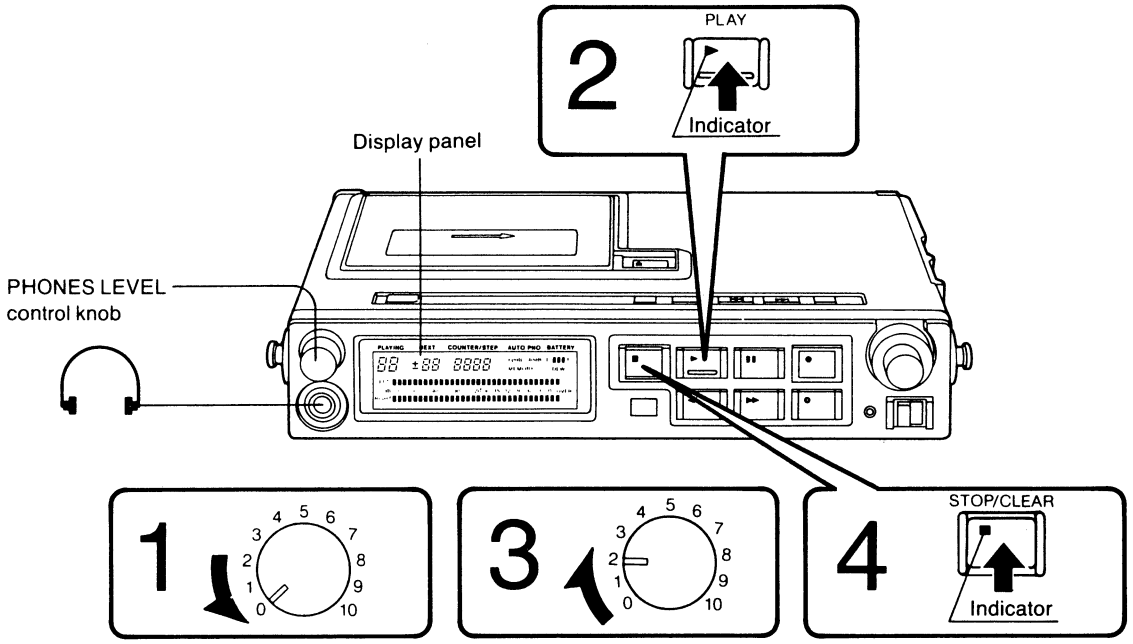
- If the REW (rewind) button is held down during playback, REW will rewind the tape at 15 times normal speed.
- If the REW button is pressed while the tape is rewinding, the unit will shift into an even faster rewind mode. At this time, the REW (◀◀) indicator flashes on and off.

Use the tape counter to determine the section of the tape you wish to listen to. (There is no sound during cue/review operation.)

ENGLISH

Playback

Standard Play



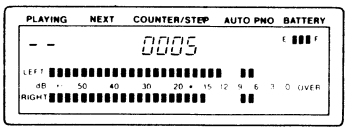
1 Turn the volume control down on the amplifier to which the unit is connected.

The line output level cannot be controlled from the unit.

- When listening with headphones, turn the PHONES LEVEL control down.

2 Press the PLAY button to start playback.

- The PLAY indicator (▶) will illuminate and playback will commence.
- The STOP/CLEAR indicator goes out.
- Even on a tape with recorded program numbers, the PLAYING display will show "– –" until the beginning of the tune has been reached.
- The same thing happens if play is initiated from the middle of the tape. This is due to the fact that a start ID must be read from the tape before a program number can be displayed. Start ID's are recorded only during the first 9 seconds of any given program.

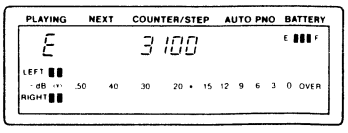


3 Adjust the volume on the amplifier to the desired level.

When listening with headphones, adjust volume with the PHONES LEVEL control.

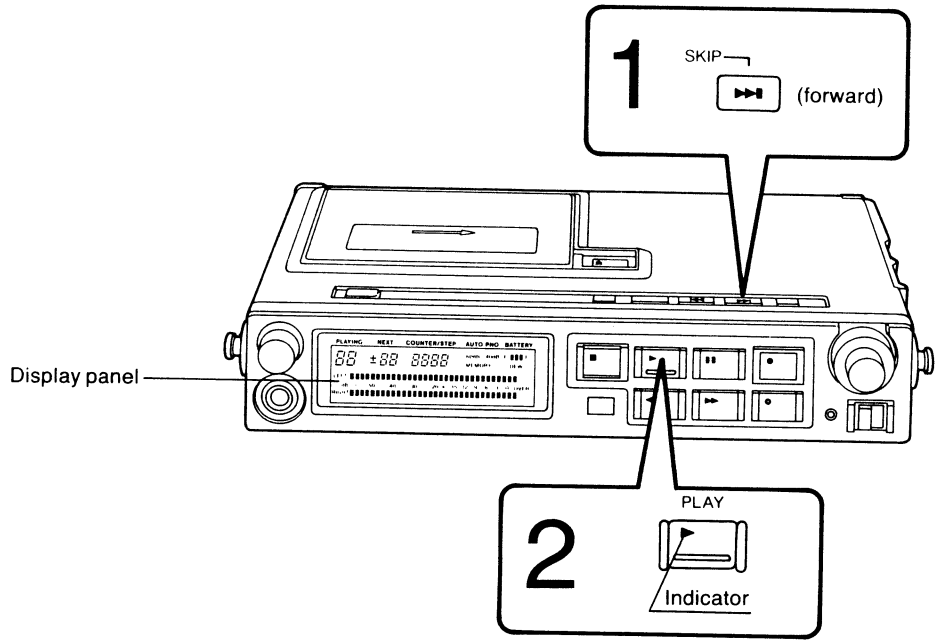
At the end of the tape

- After the last program has been played the unit switches to the STOP mode.
  The STOP/CLEAR indicator will illuminate.
- At this time the PLAYING display will show an "E" indicating "end."



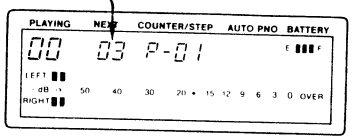
Access Play (when the unit is in the stop mode)

Playback starts from a specific program.



1 Press the SKIP (FORWARD) button to advance the display to the desired program number.

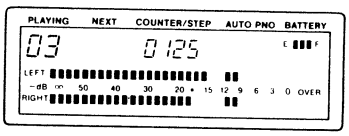
Each time the SKIP button is pressed, the program number display will advance by one number. (For instance, if the SKIP button is pressed three times the NEXT display will advance to Program No. 3.)



- If you skip ahead too far you can use the SKIP (BACKWARD) button to move back.
- Pressing the STOP/CLEAR button at any time will cancel your selection.
- If the PLAY button is not pressed within 10 seconds after making a selection, the selection will automatically be cancelled.

2 Press the PLAY button.

The PLAY indicator will illuminate and playback will begin from the specified program to the end of tape.



- The cassette tape will continue playing from your selection to the end of the tape. If you want to stop for any reason, press the STOP/CLEAR button.

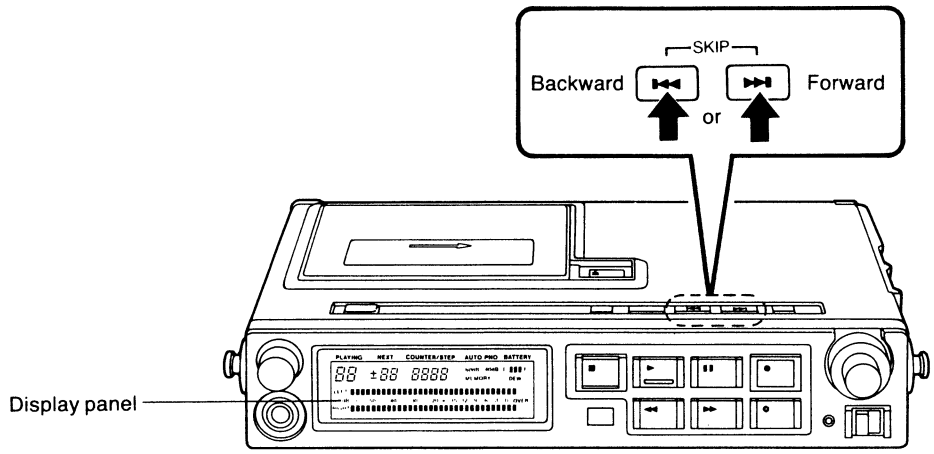
To cue the tape to the beginning of a specified program.

Press the SKIP (FORWARD) button to advance the display to the desired program number. After the display is showing the correct program number, press the PAUSE button. The tape will advance (or rewind) to the beginning of that program, and the unit will go into pause mode.

- While the unit is searching for the desired program, the pause indicator (❚❚) flashes on and off.
- If either of the SKIP buttons is pressed during program playback, the unit skips to the beginning of the next or previous program. Once the beginning of that program is found, playback mode resumes.

Skip Play (during playback)

This function allows quick access to the beginning of another program on the tape.



Forward skip (⏭)

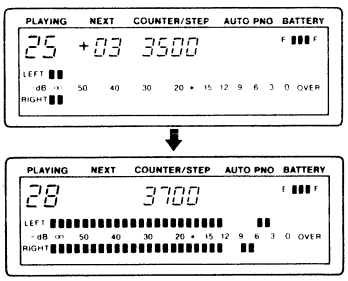
SKIP

When the forward SKIP button is pressed during playback, a number of programs will be skipped in fast forward mode according to how many times the button is pressed. When the specified program is reached, playback mode resumes. The number of programs to be skipped is shown in the NEXT display, and a plus sign (+) indicates forward skip. For example, "+03" means the unit will skip ahead by 3 program numbers.

Example:

To skip from program No. 25 to program No. 28. (while No. 25 is being played)

Press ⏭ three times.



●During skip mode, the PLAY indicator flashes on and off.

Backward skip (⏮)

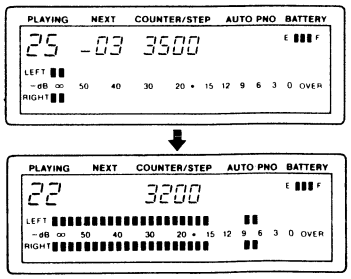
SKIP

When the backward SKIP button is pressed during playback, a number of programs will be skipped in rewind mode according to how many times the button is pressed. When the specified program is reached, playback mode resumes. The number of programs to be skipped is shown in the NEXT display, and a minus sign (−) indicates backward skip. For example, "−03" means the unit will skip back by 3 program numbers.

Example:

To skip from program No. 25 to program No. 22. (while No. 25 is being played)

Press ⏮ four times.

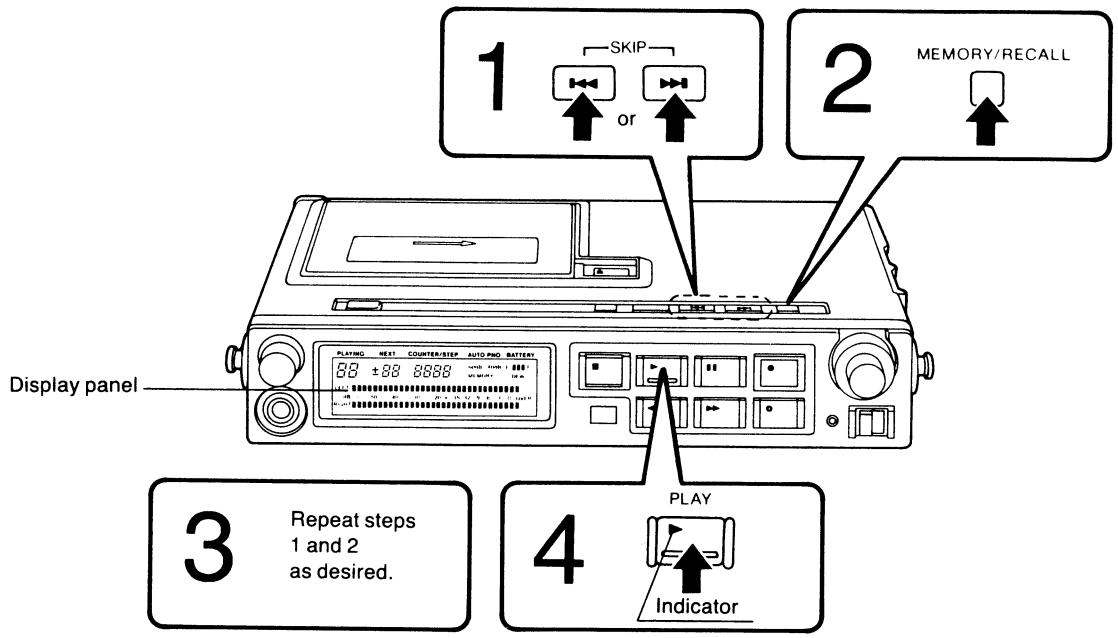


Notes:

- If the backward SKIP button is pressed only once, the NEXT display will show "−00" and the tape will rewind to the beginning of the program currently being played.
- When skipping in reverse the backward SKIP button must be pressed one more time than the number of programs it is desired to skip. For example, to move back by one program number, the backward SKIP button must be pressed twice.

Program Play (when the unit is in the STOP mode)

You can record as many as 32 program numbers on a cassette tape and play them back in any random order.



1 Press the forward or backward SKIP button to specify the desired program number.

You can move quickly forward or backward through the program numbers by holding down either one of the SKIP buttons.

Note:

The forward SKIP button must be pressed first in order to initiate programming mode.

2 Press the MEMORY/RECALL button to enter the desired program number into memory.

3 Repeat steps 1 and 2 until the desired programming is completed.

Pressing the STOP/CLEAR button will cancel all the programmed tracks entered into the memory.

4 Press the PLAY button to start program play.

- Program play begins with the first program selection entered, and continues through the sequence programmed.
- The unit stops automatically when the last selection programmed is over.
- If the PAUSE button is pressed instead of the PLAY button, the unit moves to the beginning of the first selection in the programmed sequence and then goes into the PAUSE mode.

Notes:

- When program play is performed, make sure that a program number is shown in the PLAYING display.
- If either of the SKIP buttons is pressed during program playback, the unit skips to the beginning of the next or previous tune.
- During program play, the FF button and the REW button do not function.

Refer to the example in the following page.

Example:

To play tune 3, tune 5 and tune 1 in that order:

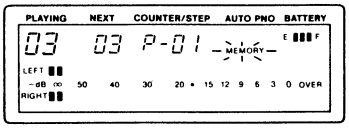
SKIP

1 Press ⏭ three times.

MEMORY/RECALL

2 Press ▢ .

The MEMORY indicator appears when the specified program number is entered into memory.

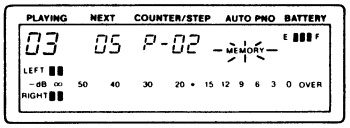


SKIP

3 Press ⏭ twice.

MEMORY/RECALL

4 Press ▢ .

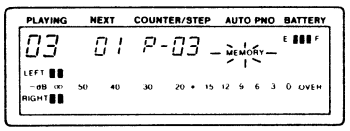


SKIP

5 Press ⏮ four times.

MEMORY/RECALL

6 Press ▢ .



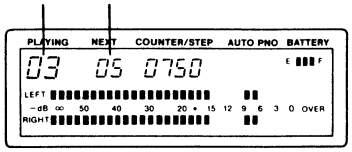
PLAY

7 Press ▶ .

When the PLAY button is pressed, program playback begins from tune 3.

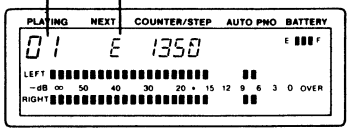
- During program playback the NEXT display shows the next program number in your sequence.

Tune being played Next tune



- When the last tune is being played, the NEXT display will show "E".

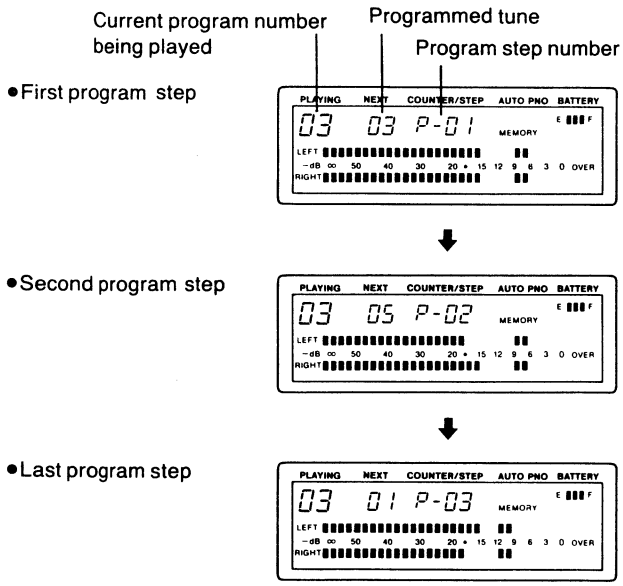
Last tune "E" signifies the end of program.



Recall function

To display program numbers during playback, press the MEMORY/RECALL button.

- When the MEMORY/RECALL button is pressed during program playback, the program numbers and corresponding numbers in the sequence stored in memory are shown one after another in the NEXT and COUNTER/STEP display sections. ("P" in the display stands for program).
  The diagram below shows that program numbers 3, 5, and 1 have been entered into program memory in that order.



If the MEMORY/RECALL button is pressed twice in succession while entering a program sequence into memory, the display will sequentially show the steps which have been entered. This provides a convenient way to quickly verify what program steps are currently in memory.

To enter the same program number twice in succession;

First enter the program number in the normal way using the SKIP buttons and the MEMORY/RECALL button. Then to enter it again, use either of the SKIP buttons to move the display up or down by one program number. Finally, use the opposite SKIP button to return the display to the previous number, and press the MEMORY/RECALL button.

Pause operation during program playback

If the STOP/CLEAR button is pressed during program playback the whole programmed track sequence will be cancelled. If you want to interrupt program playback, press the PAUSE button.

ENGLISH

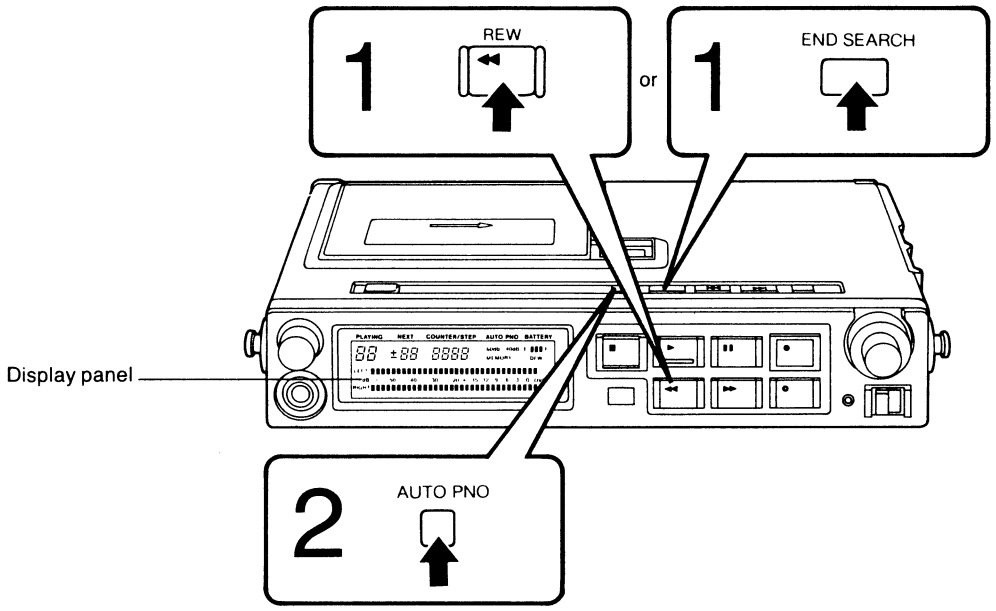
Before Recording

Notes:
- Before recording, be sure to press either the REW (rewind) or the END SEARCH button.
- If recording is begun with the PLAYING display showing "- -", the program numbering function will be inoperative.

To record program numbers

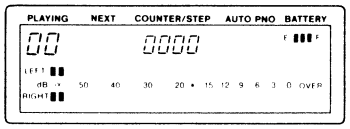
Program play and access play are possible if program numbers are added to the tape during recording. There are two ways to record program numbers on the tape.

1) Automatic program numbering 2) Manual program numbering



When recording from the beginning of a tape

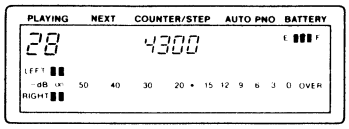
1 Press the REW button to rewind the tape.
Rewind the tape to its starting point. The PLAYING display shows "00".



OR

To continue recording from the last recording position

1 Press the END SEARCH button to move the tape to the last recording position.
END SEARCH advances and scans the tape at 60 times normal tape speed and automatically stops at the point where recording on the tape ends. The PLAYING display shows the program number of the last recorded passage.



2 Press the AUTO PNO (program numbering) button to select the input level sensitivity according to the recording source.
Each time the AUTO PNO button is pressed, the display will toggle from "−40 dB" to "−60 dB" to No Display and repeat. (See next page for details.)

Notes:
- The AUTO PNO (program number) is operable while recording.
- Since the track numbers are recorded on the tape they will not be erased if the OPERATION switch is turned OFF.
- When you replace the battery, the unit shifts automatically to the manual numbering function.

About AUTO PNO (automatic program numbering)

- When making recordings from compact discs or other music sources, it is very convenient to record program numbers onto the tape in much the same way as this information is recorded on compact discs.
- During recording, the automatic program numbering function on the SV-260A will detect drops of −40 dB or −60 dB in the source sound level lasting longer than approximately one second. These drops in sound level represent the silent space between tracks. After each such space the automatic program numbering function will assign a consecutive program number to the next section of tape and record that number onto the tape itself.

AUTO PNO −40 dB — Switch AUTO PNO to the "−40 dB" detection level setting when there is a lot of noise between tunes in the audio source. For instance you may find a lot of noise between music on analog phonograph records or with certain tuners.

AUTO PNO −60 dB — Switch AUTO PNO to the "−60 dB" detection level setting when there is very little noise between tunes in the audio source. This is especially true for compact discs. Recording classical or other music with extremely quiet sections will also require the "−60 dB" setting.

AUTO PNO — No display under AUTO PNO means that you are in the manual program numbering mode. Pressing the PLAY button while recording in this mode will assign and record consecutive program numbers on the tape.

"−40 dB"	**Automatic program (track) numbering** The space between tunes is automatically detected and program numbers assigned. These program numbers are recorded on the tape. (The AUTO PNO display shows the interval detection level in use.)
"−60 dB"	
No Display	**Manual program numbering** Program numbers can be assigned manually by pressing the PLAY button while recording is under way.

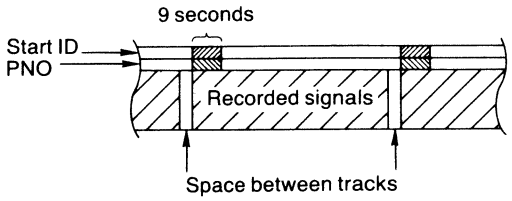
About manual program numbering

- The manual program numbering function must be used when recording with a microphone.
  When the PLAY button is pressed at the start of recording or during recording, a program number is assigned to that section of tape and recorded on the tape itself.
  Each time the PLAY button is pressed the number advances by one.
- When recording from another audio source, the PLAY button may be pressed whenever you wish to assign and record a program number on the tape. (The interval between program numbers must, however, be longer than 9 seconds.)

Note:
After recording a program number on the tape, wait at least 9 seconds before recording another.

How recording works on the SV-260A

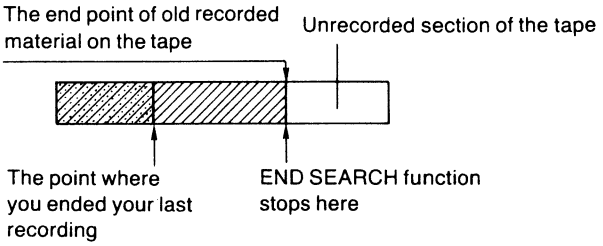
- The DAT system converts the audio signal from the recording source into a PCM (Pulse-Code Modulation) digital signal which is recorded onto the tape. Besides the recorded audio signals, the DAT cassette tape also records signals that mark the beginnings of tunes and signals necessary for program playback.
- In the SV-260A, the start ID and program numbers are recorded during the first 9 seconds of each new track or section of tape.



Proper program numbering

- To be sure that correct and usable program numbers are being assigned and recorded on the cassette tape, the starting point for recording has to be exactly right. The SV-260A is designed so that the program numbering function will not work if the PLAYING display is showing "- -". This is to prevent you from recording incorrect program numbers. As already mentioned above, these program numbers become a permanent part of the recording and need to be entered correctly in order for the search and program playback functions to work properly.
- To make sure you are at the right starting point for recording, follow the set of simple operations given here before recording:

Note:
In cases where you are in the process of re-recording a cassette tape, the END SEARCH function will not be able to detect where you ended your last recording if the cassette tape contains old recorded material beyond that point. The END SEARCH function will advance the tape to the end of all recorded portions.


The end point of old recorded material on the tape
Unrecorded section of the tape
The point where you ended your last recording
END SEARCH function stops here

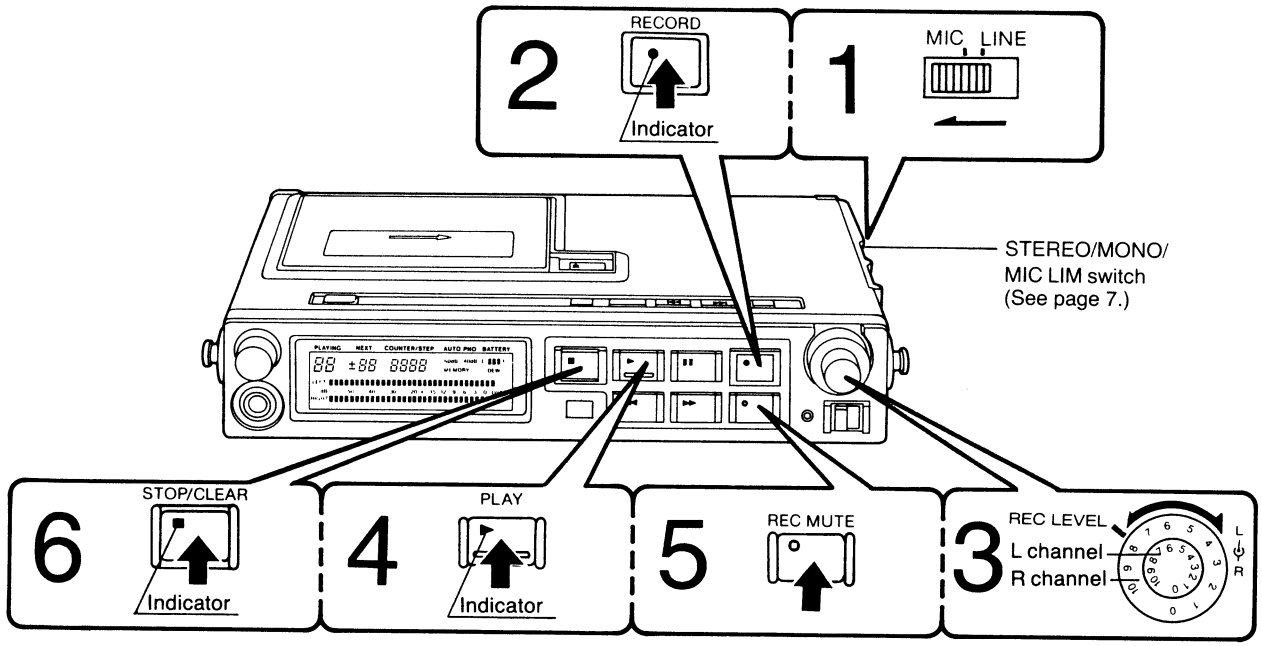
The start ID function

If you begin recording without following the instructions given above for properly assigning program numbers, a start ID signal only will be recorded at the point where recording begins. In the same way, if the END SEARCH function is used to advance to the end of the recorded position on a tape without program numbers, only a start ID signal will be recorded. In cases like this, the start ID functions as a marker denoting the boundary between programs (or tape sections) and the SKIP feature will work. You will not, however, be able to use the access play or program playback functions.

ENGLISH

Recording

Recording with Microphones



1 Set the INPUT switch to MIC position.

2 Press the RECORD button.

- The REC indicator (●) and the PAUSE indicator (❚❚) illuminate and the unit is now in the record standby mode.
- If the tape is at the beginning of the reel the PLAY indicator (▶) illuminates for a period of approximately two seconds. This shows that any previous recorded material on that cassette tape will be erased.

3 Adjust the record level with the REC LEVEL control, while watching the peak level meter

(See page 22.)

Note:

The MIC LIM (microphone limiter) switch must be in the "OFF" position when adjusting REC LEVEL.

4 Press the PLAY button to begin recording.

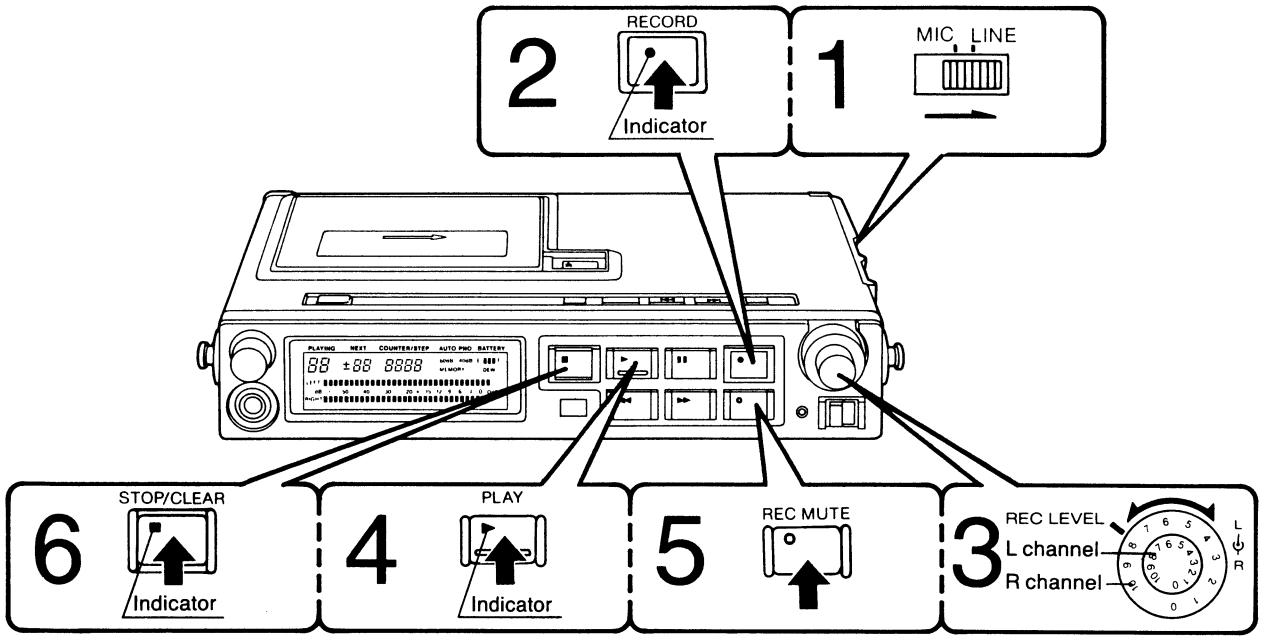
The PAUSE indicator (❚❚) goes out and the PLAY indicator (▶) illuminates.

5 When recording has finished press the REC MUTE button.

This will insert a silent space in the tape. The unit will then go into recording standby mode. The REC MUTE button inserts an unrecorded silent space four seconds long.

6 Press the STOP/CLEAR button.

Recording from another Audio Source (LINE INPUT)



1 Set the INPUT switch to the LINE position.

2 Press the RECORD button.

- The REC indicator (●) and the PAUSE indicator (❚❚) illuminate, and the unit is now in the record standby mode.
- When the cassette tape is at the very beginning of the reel the PLAY indicator (▶) illuminates for a period of approximately two seconds. This shows that any previous recorded material will be erased.

3 With the audio source playing, adjust the recording level with the REC LEVEL control, while watching the peak level meter.

(See page 22.)

4 Press the PLAY button to begin recording.

The PAUSE indicator (❚❚) goes out and the PLAY indicator (▶) illuminates.

5 When the recording is complete, press the REC MUTE button.

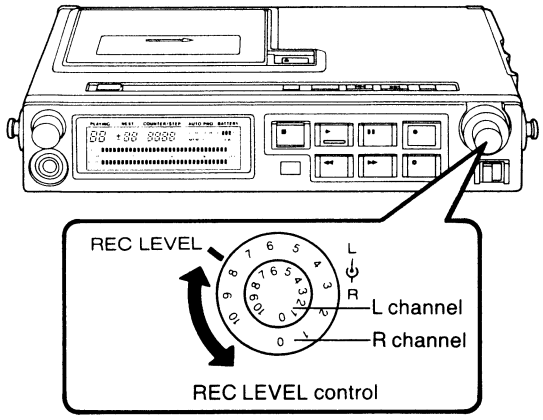
This will insert a silent space on the tape. The unit will then go into the recording standby mode. The REC MUTE button inserts an unrecorded space four seconds long.

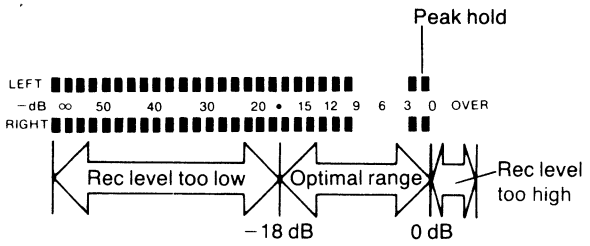
6 Press the STOP/CLEAR button.

How to adjust the recording level

Recording level adjustments are made by turning the REC LEVEL control while watching the peak level meter. (See below.) The REC LEVEL control should be adjusted so that the peak level meter always stays between −18 dB and 0 dB. The upper segments of the peak level meter show the left channel level and the lower segments, the right channel level. The REC LEVEL control has a dial for each channel and they should be as evenly balanced as possible.

Note:
The MIC LIM (microphone limiter) switch must be in the "OFF" position when adjusting REC LEVEL.





- Optimal range: between −18 dB and 0 dB

- The segments are designed to stay fixed on the peak level (peak hold) for a period of about 2 seconds to make it easier to accurately adjust the REC LEVEL.

Notes when recording live outdoors

- When using the SV-260A outdoors, never expose it to direct sunlight, high temperatures, rain, dew or excessive dampness.
- Pay close attention to the DEW indicator on the unit as well.
- Remember that live recording in very cold climates is quite different from recording at normal temperatures (i.e., 20°C ±5°C) and a lot of unexpected problems may arise. For instance, as temperatures approach 0°C battery service life is radically shortened. So before going outdoors make sure your battery is fully charged and new. It is also a good idea to have spare fully-charged batteries.

How to use the rec mute button

When the REC MUTE button is pressed during recording, a silent space four seconds long is recorded on the tape and the unit then goes into record standby mode.

■ Inserting silent spaces of varying lengths

- Pressing the REC MUTE button at the end of a recording position will insert a four-second silent space on the tape.
- A silent space shorter than four seconds can be inserted by pressing the PAUSE or PLAY buttons less than four seconds after pressing the REC MUTE button.
- A silent space longer than four seconds can be inserted by holding the REC MUTE button down for the desired length of time.

Erasing a pre-recorded tape

- Re-recording a tape will automatically erase anything previously recorded on that tape.
- It is also possible to only erase a pre-recorded tape without re-recording. To do so, turn the REC LEVEL control to "0" and disconnect all input sources, and then record.
- This method erases only the audio signal on a tape, non-audio signals (for instance, program numbers) recorded on the tape remain. If the END SEARCH button is pressed, the tape will still be advanced to the end of the previously recorded position.

Note:
The REC LEVEL control cannot shut off the audio signal from input terminals.

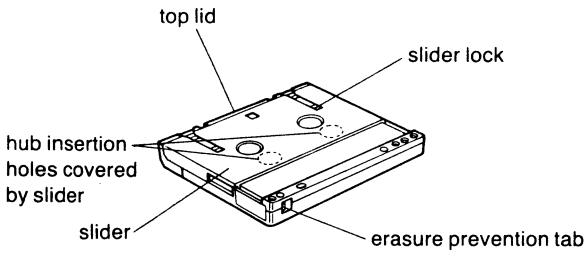
Re-recording a tape which you have erased

The END SEARCH button cannot be used to continue recording on a tape which has been erased. In this case, the REW (rewind) button must be pressed and re-recording begun from the beginning of the tape.

About DAT Cassette Tape

About DAT Cassette Tape

DAT tape can be recorded and played on only one side.
DAT cassette tapes, unlike compact cassettes, are completely sealed. Also, the tape and hub holes are protected by a top lid and slider.
The cassette is so designed that, apart from when it is loaded, dust or foreign particles cannot enter the cassette housing to cause dropout (digital signal losses). Dropout is the main reason for impairment of quality in digital recording.



Handling DAT Cassette Tapes

- Moisture may condense on a tape which is carried suddenly from a cold place into a warm room, so wait about 20 minutes before using it.
  If the tape is used with moisture on its surface, it will be damaged.
- Do not attempt to dry a cassette tape with moisture on its surface by using a hair dryer or other appliance.
- Do not open the top lid of the cassette, pull the tape out or touch it.
- Take care not to drop the cassette, hit it or subject it to violent vibration.
- The cassette mechanism has been assembled very precisely. It should on no account be disassembled.
- The cassette cannot be used on the reverse side.

Storing DAT Cassette Tapes

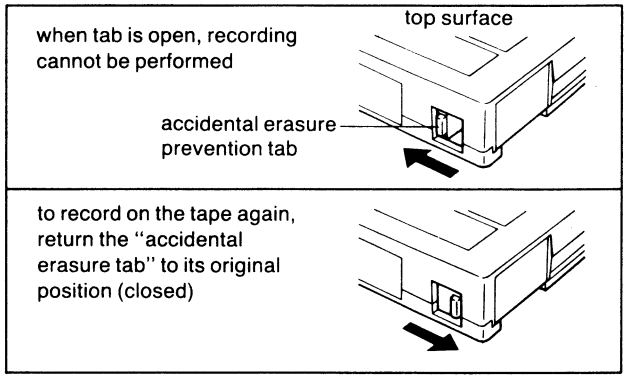
- Store the cassette in its case to prevent the entry of dust.
- Do not leave or store the cassette in the following locations:

1. Near objects with strong magnetic fields (speakers, televisions, transformers, motors or magnets).
   Magnetic fields may cause the loss of valuable recordings.
2. Places with excessive humidity (over about 80%) or dust.
3. Places with high temperatures (over about 35°C).
4. Places exposed to direct sunlight or heat from heating appliances.
   The cassette should never be left in a car dashboard or near the rear window.
5. After use, rewind the tape to the beginning. If rewinding is interrupted, it may lead to creases in the tape and affect sound quality on playback.

Using DAT Cassette Tapes

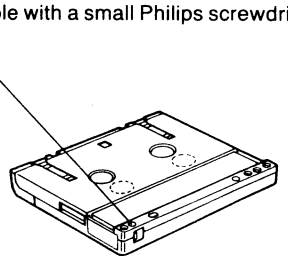
•To avoid accidental erasure of valuable recordings
Recorded tapes you want to keep can be protected by sliding the "accidental erasure prevention tab" open towards the center of the cassette with the aid of a small screwdriver as in the diagram. It will then be impossible to record on the tape, and valuable recordings will not be erased by accident.

•Method of using accidental erasure prevention tab


when tab is open, recording cannot be performed
top surface
accidental erasure prevention tab
to record on the tape again, return the "accidental erasure tab" to its original position (closed)

Cassette Tapes with no Accidental Erasure Prevention Tab

Break open the hole with a small Philips screwdriver or other tool



With this method, however, the tape cannot be returned to its original condition, and it cannot therefore be recorded again.

ENGLISH

Operation Notes

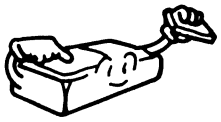
Taking care of the unit

■ Always close the cassette holder

Leaving the cassette holder open exposes the transport mechanism and heads to dust which can degrade playback and recording capabilities. Never touch any of the inner parts of the cassette holder.

■ Do not place heavy objects on top of the unit.

■ Remove the cassette tape from the cassette holder when not in use for a long time.



■ Turn down the amplifier volume control.

- DAT cassette tapes have much less noise and a much wider dynamic range than conventional compact cassette tapes. Consequently, you may turn the volume up too high if you adjust it by trying to listen to surface noise as you might with a cassette tape. To prevent this problem, turn the volume down, increasing it as desired only after the music has started.

- Be especially careful not to hurt your ears with excessive volume levels when listening to taped materials with headphones.

■ When carrying or storing the unit, handle it with care so it is not subjected to any strong bumps.

- Always remove the cassette tape before storing the unit for any period of time.

This unit is designed to withstand the bumps and shocks normally encountered by a portable unit. Therefore, you can operate this unit while walking. However, you should not operate this unit while running, exercising or making any other rapid movements because strong bumps and shocks can cause skipping.

■ Do not take this unit apart or attempt to make any changes yourself.

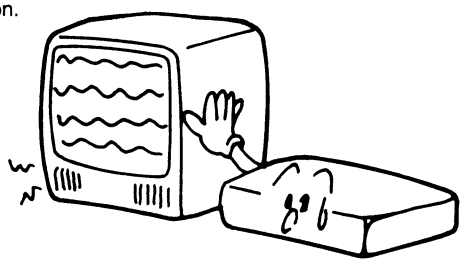
Precautions for installation

■ This unit incorporates many sensitive components. To enjoy optimum performance at all times, avoid placing this unit under the following conditions.

- In a closed vehicle or other location where the temperature could exceed 40°C.
- For long periods of time in direct sunlight.
- In very cold places (below 0°C).
- In very humid locations.
- Near a heat outlet or heating appliance.
- In dusty or smoky locations.
- Near appliances generating strong magnetic fields.
- On top of appliances which generate heat.

■ Do not place near a tuner or television

This unit uses high frequency signals and can cause interference with tuner and television reception. If this occurs, move the unit farther away from the tuner or television, or change from an interior to an exterior television antenna.
Otherwise turn off the OPERATION switch while using a tuner or television.



Moisture condensation inside the unit and/or cassette tape

- In winter you have probably noticed how moisture droplets form on the window glass of heated rooms. We call this phenomenon moisture condensation.

■ Moisture may condense inside the SV-260A or inside the cassette you are using in the following situations:

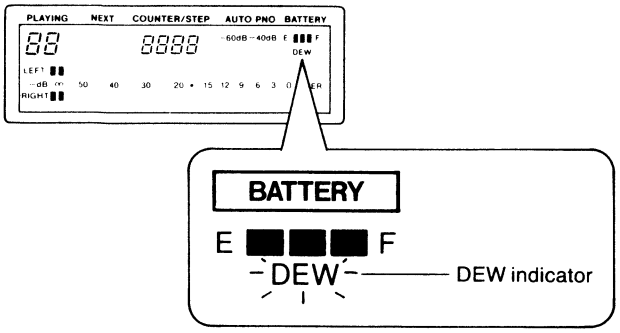
- In a room where the heat has just been turned on,
- When steam or excessive moisture is present in the room,
- When the unit or cassette is carried suddenly from the cold outdoors into a heated room,
- When the unit or cassette is directly in the path of cold air from air conditioning or other cold air source.
- The unit will not work properly under any of the conditions described above. Even when the unit appears to be working properly you may very well be damaging the cassette tape.
- Moisture buildup on the rotating heads should be avoided at all costs. It will cause the tape to stick to the heads, normal tape transport will be hampered and both tape and rotating heads may be severely damaged.

Maintenance

To clean this unit, use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth, dipped into a soap-and-water solution or a weak detergent solution. Wring the cloth well before wiping the unit. Wipe once again with a soft, dry cloth.
Never use alcohol, paint thinner, benzine, nor a chemically treated cloth to clean this unit.
Such chemicals may damage the finish of your unit.

What to do if moisture condenses

If the DEW indicator (under the BATTERY display) lights up, the unit automatically prevents any further playback or recording.



If a cassette is loaded in the unit when the DEW indicator lights up, remove it immediately and wait until the DEW indicator goes out before operating the unit.
If the unit is connected to the AC adaptor when the DEW indicator lights up, a heater inside the unit will be automatically activated.

■ When to resume using the unit

- After waiting some time, turn the OPERATION switch ON and let the unit sit for about an hour before resuming use.
- Although the time it takes for moisture to evaporate will vary, it should never take more than a few hours.
- Condensation usually sets in gradually and not until the process has been going on for 10–15 minutes will moisture begin to be visible.
- In very cold climates moisture will freeze and become frost. Under such conditions it may take some time for the frost to melt.
- You can prevent the condensation that occurs when the unit or cassette is carried from the cold outdoors into a warm room by putting them in a bag made of vinyl or other insulation material.

DAT Head and Tape Transport Cleaning

If the head and tape transport are stained causing sound problem or operation failure, the head and tape transport should be cleaned by playing the cleaning cassette.

■ Daily Cleaning

Once per day, the following cleaning should be performed;
1. Play the cleaning tape once per day.
2. Play the cleaning tape for 15 seconds every day.
3. Do not use the same part of cleaning tape.

■ If the head is extremely dirty

If dust or dirt adheres to the rotating mechanism (the part with which the tape comes into contact), recording and playback performance will deteriorate. In this case, play a special DAT cleaning tape.

- If playback quality improves after cleaning, but then deteriorates immediately after recording or playing back several times, the cassette tape has probable reached its useful lifetime. In this case, use a new tape.
- If sound quality does not improve even after cleaning, consult your dealer.
- Cleaning tapes cannot be used for recording or playback (be sure to read also the operating instructions supplied with the tape).

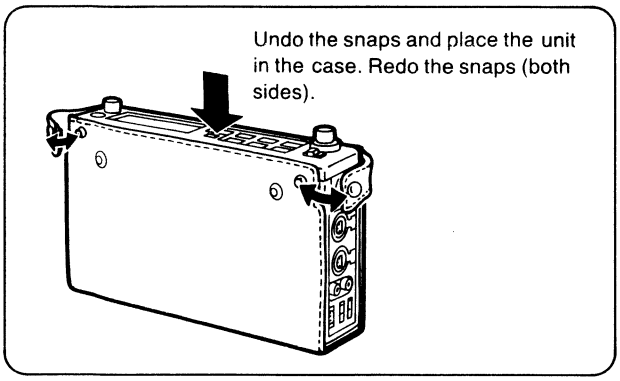
Troubleshooting Guide

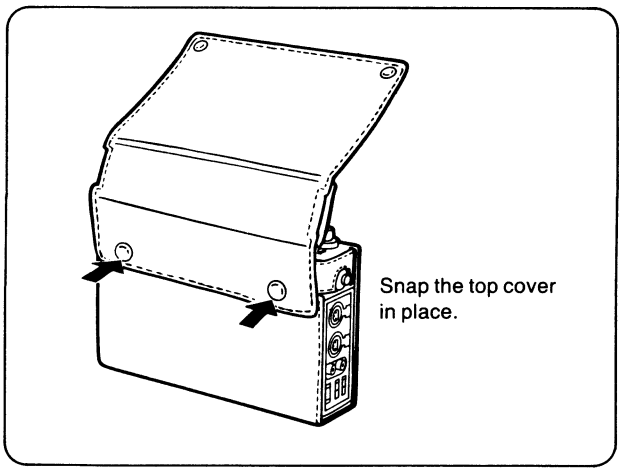
If the unit does not operate properly, check all of the following points, as well as connections and the control positions of all components connected to this unit, before requesting professional servicing. This table does not include checks for mistaken connections or incorrect settings of other components. If the problem is not solved using this table or is not included in the problems listed below, contact your Technics dealer for assistance.

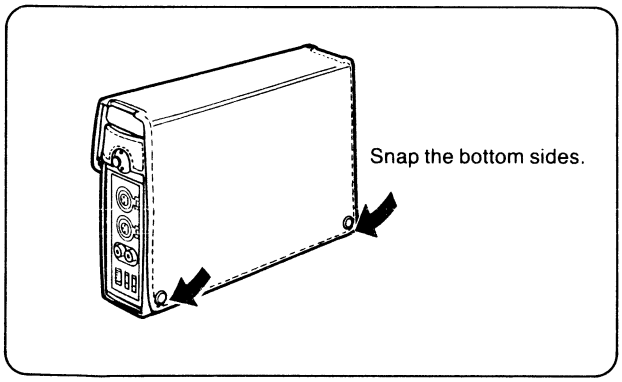
Problem	Causes	Remedy
You cannot record or play cassettes even when the OPERATION switch is turned ON.	•There may be moisture condensation inside the unit.	•Wait until the DEW indicator goes out.
The cassette holder does not close.	•The cassette tape is not properly loaded in the unit.	•Take the cassette tape out of the holder and reinsert it in the proper direction.
Tape transport is taking place but you are not getting any sound during playback.	•The PHONES LEVEL control is turned all the way down.	•Turn the PHONES LEVEL control until you obtain a suitable volume level.
	•The volume control on your amplifier is turned all the way down.	•Adjust the volume control on the amplifier to a suitable level.
	•The amplifier input selector is switched to the incorrect setting.	•Set to the Input selector setting that corresponds to the unit hookup.
You are getting noise or distortion during playback.	•The recording level when the tape was made was either too high or low.	•Re-record the tape at a proper recording level.
	•The cassette tape is worn out.	•Replace the worn cassette tape with a new one.
You cannot record.	•The erasure prevention tab on the cassette tape you are using is open.	•Close the erasure prevention tab.
	•The unit is not connected properly to the input source.	•Properly connect the unit and check the functioning of the input source.
The tape is moving but you cannot record any sound.	•The REC LEVEL control is on "0".	•Adjust the REC LEVEL to a proper recording (input) level.

How to Use the Carrying Case

Placing the unit in the carrying case

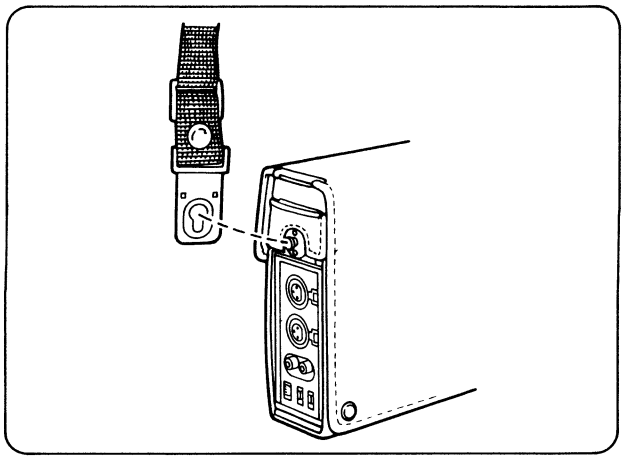


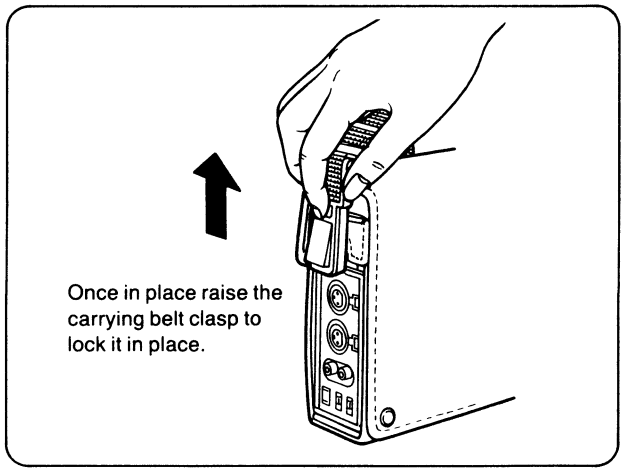




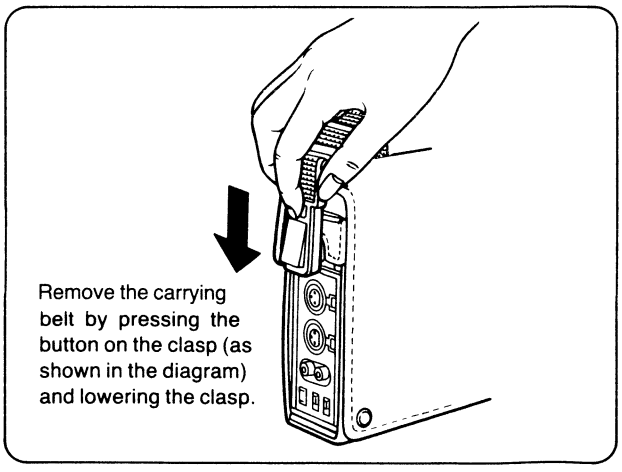
To remove the unit from the case, follow the instructions given here in reverse.

Attaching the carrying belt





Removing the carrying belt



Specifications

Signal format

Recording system: Rotary-head DAT
Sampling frequencies:
Recording; 48 kHz
Playback; 44.1 kHz, 48 kHz (automatically switched)
Decoding: 16-bit linear

Audio

Number of channels: 2 (stereo)
Frequency response: 10 Hz–22 kHz, +0.5 dB, −1.5 dB
Dynamic range: More than 87 dB
S/N ratio: More than 88 dB (full scale level)
Equivalent Input Noise: less than −128 dBm. 150Ω source 20 Hz to 20 kHz Audio Band
CMRR: 70 dB minimum at 1 kHz REC LEVEL control maximum
Total harmonic distortion: Less than 0.05% (input level +4 dBu, output level −14 dBu)
Wow & flutter: Unmeasurable

Input/output terminals

LINE INPUT (NOMINAL LEVEL): −37 dBu to +8 dBu (adjustable with REC LEVEL control)
Line input impedance: more than 10 kΩ, balanced, transformerless
MIC INPUT (NOMINAL LEVEL): −70 dBu to −25 dBu (adjustable with REC LEVEL control)
Mic input impedance: more than 10 kΩ, balanced, transformerless
Line output: −14 dBu (RCA phono jacks×2)
Line output impedance: 1.2 kΩ, unbalanced
Headphone output: 20 mW+20 mW, 16Ω load
Digital output: Coaxial 75Ω, cable supplied

Mechanism section

Head: Amorphous Ferrite mixed type
Cylinder: 15 mm diameter, wrap 180 degrees
Revolution of cylinder: 2000 r.p.m. (record/playback)
Tape speed: 8.15 mm/sec. (playback: 8.15/12.225 mm/sec. switched automatically)
Search speed: Approx. 60 times normal speed (maximum)
FF/REW time: Approx. 120 sec. (with 120-minute tape)

General

Power supply: AC 110–120/220–240 V, 50/60 Hz, 20 W (with supplied AC adaptor) DC 6 V, approx. 4.3 W (with supplied rechargeable battery pack)
Maximum continuous battery operation (continuous recording and playback): Approx. 2.2 hours (with 8-hour battery charge)
Dimensions: (W×H×D) 228×44×137 mm
Weight:
Including battery; 1.45 kg
Without battery; 1.08 kg

*0 dBu is referenced to 0.775 V.

Note:
Specifications are subject to change without notice.
Weight and dimensions are approximate.